

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDAST3M580

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE



ME: *Erigeron anchana*
COMMON NAME: Mogollon Fleabane, Sierra Ancha Fleabane
SYNONYMS: *Erigeron pringlei* Gray (in part)
FAMILY: Compositae

AUTHOR, PLACE OF PUBLICATION: G. Nesom, Phytologia. 69(3): 227-235. 1990.

TYPE LOCALITY: Devils Chasm, Sierra Ancha Mountains, Gila County, Arizona. Scattered on granite cliff face near canyon bottom, 3,600 feet. 7 August 1981.

TYPE SPECIMEN: HT: ARIZ 232654. G. Yatskievych, Windham & Hevly, 81-305. 7 August 1981. IT: TEX.

TAXONOMIC UNIQUENESS: A 1990 revision of *E. pringlei* by Guy Nesom at the University of Texas at Austin, split the species into four taxa: *E. pringlei*, *E. heliographis*, *E. saxatilis*, and *E. anchana*. All are restricted to mountains within Arizona. Each species is morphologically as well as geographically distinct. "The four species of the *E. pringlei* group might be treated as geographic entities within a single species, where they would be given formal status as varieties. The differences among them however, are consistent with the degree of difference found among other groups of similar, closely related species of North American *Erigeron* traditionally recognized as distinct" (Nesom 1990). *E. anchana* is the largest of the "*pringlei*" complex, and is 1 of 171 species in the genus *Erigeron*.

The long branches of the central Arizona populations of *E. pringlei* show strong similarity to *E. anchana*. However, the exact pattern of relationship between them or any species of the *E. pringlei* group is not clear (Nesom 1990).

DESCRIPTION: Perennial herb from a thick taproot, with somewhat woody caudex. Plants with several crowded, thick, caudex branches 2.0-3.0 cm (0.8-1.2 in.) long. Persistent leaf bases from previous year's caudex branches, gives plant a very "rough" appearance. Stems are 7-22 cm (3-9 in) long (up to 15 cm long in Falk & Jenkins et al. 2001), ascending to somewhat pendant, usually with a few branches above the middle. Stems and leaves are nearly glabrous to sparsely pubescent. Basal leaves entire, obovate, 2-3 cm (0.8-1.2 in.) long, 4-8 mm wide, cauline leaves (born on the stem) only smaller. Flowers are small heads 5-7 mm wide, with ray flowers white to lavender in color, and disc flowers with orange-resinous veins; rays flowers 24-36. Involucral bracts in 3-4 series, often purplish, and also with

orange-resinous veins; pappus of 19-26 persistent bristles, the longest 2.3-2.6 mm. (Nesom 1990, Falk & Jenkins et al. 2001).

AIDS TO IDENTIFICATION: The small size (mostly less than 15.0 cm [6.0 in.] tall), persistent petioles (leaf bases) from the growth of the previous year, and stout, nearly woody caudex identifies the *E. pringlei* group. The purple-tinged phyllaries and ligules of *E. anchana* distinguish it from *E. kuschei*. The petioles of *E. anchana* are twice as long than *E. pringlei*. The pappus bristles are more numerous in *E. anchana* (19-26), and the orange-resinous veins are also unique to *E. anchana*.

ILLUSTRATIONS: Line drawing (B. Dennis, in Falk & Jenkins et al. 2001)
Color photos (Barb Phillips, in Falk & Jenkins et al. 2001)

TOTAL RANGE: Known mainly from the mountains of central Arizona, Gila County, including the Sierra Ancha, Pine, Mazatzal, and Mescal mountains. One location from the Superstition Mountains in Pinal County. The Sierra Ancha's are the center of their range.

RANGE WITHIN ARIZONA: See "Total Range."

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous perennial.

PHENOLOGY: Flowers May-July, sometimes to November.

BIOLOGY: Probably a fairly long lived plant able to deal with drought conditions.

HABITAT: Granite cliff faces, chaparral through pine forests (Falk & Jenkins et al. 2001). Rock crevices or ledges on boulders and vertical rock faces, usually in canyons.

ELEVATION: 3,500 - 7,000 ft. (1068 - 2135 m).

EXPOSURE: All aspects of 20-90 degrees.

SUBSTRATE: Igneous or metamorphic granites. Also can be found on limestone (including travertine), quartzite, and rhyolite.

PLANT COMMUNITY: Chaparral; pinyon/juniper woodland; pine-oak forest. Dominant associated species include: *Abies concolor* (white fir), *Acer grandidentata* (bigtooth maple), *Acer negundo* (boxelder), *Alnus oblongifolia* (Arizona alder), *Amorpha californica* (stinkingwillow), *Anisicanthus thurberi* (birdshade), *Celtis reticulata* (paloblanco), *Cheilanthes* sp. (lipfern), *Cimicifuga arizonica* (Arizona bugbane), *Cornus stolonifera* (red-osier dogwood), *Cynodon dactylon* (Bermudagrass), *Erigeron saxatilis* (rock fleabane),

Fraxinus pennsylvanica ssp. *velutina* (velvetskirt ash), *Galium* sp. (bedstraw), *Juglans major* (Arizona walnut), *Juniperus* sp. (Juniper), *Maurandya* sp. (lizard tail), *Pachystima myrsinites* (mountain-lover boxleaf), *Penstemon* sp., *Phleum pratense* (blue timothy), *Platanus wrightii* (Arizona sycamore), *Pseudotsuga menziesii* (Douglas-fir), *Quercus gambelii* (gambel oak), *Quercus* sp. (oak), *Robinea neomexicana* (New Mexico locust), *Rubus* sp. (berry), *Salix* sp. (willow), *Sambucus* sp. (elder), *Setaria* sp., *Smilicina* sp. (Solomon-plume), *Solidago* sp. (goldenrod), and *Toxicodendron rydbergii* (poison-ivy).

POPULATION TRENDS: Apparently *E. anchana* is locally abundant in the Sierra Ancha Mountains, the center of its distribution (Nesom 1990).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS:	None (USDI, FWS 1996) [C2 USDI, FWS 1993]
STATE STATUS:	None
OTHER STATUS:	Forest Service Sensitive (USDA, FS Region 3 1999)

MANAGEMENT FACTORS: Occurs on relatively inaccessible rock cliffs. Potential impacts from trails and recreation.

CONSERVATION MEASURES TAKEN: Tonto Natural Bridge State Park protects one population.

SUGGESTED PROJECTS: Survey potential habitat in Santa Theresa and Galiuro mountains. Map occupied and potential habitat (definitive habitat, easily recognized); monitor numbers of plants at several sites.

LAND MANAGEMENT/OWNERSHIP: USFS - Tonto National Forest; Arizona State Parks - Tonto Natural Bridge State Park; Private. Not known from the Coronado National Forest, but potentially in the Santa Theresa and Galiuro mountains.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

- Steve McLaughlin - University of Arizona, Tucson.
- Guy Nesom - University of Texas, Austin.
- Barb Phillips - Coconino National Forest, Flagstaff, Arizona.

ADDITIONAL INFORMATION:

- E. heliographis*: above 8,250 feet on rocks within mixed conifer forest.
- E. anchana*: cliffs and rocks from about 3,500 to 7,000 feet in various vegetation types.
- E. saxatilis*: About 4,400 to 7,000 feet in canyons along the Mogollon Rim.
- E. pringlei*: cliffs and rocks from about 5,500 to 9,200 feet.

E. pringlei would include the type specimen and other plants from the Santa Rita Mountains and mountains of central Arizona. *E. heliographis* is a diminutive form found at high elevations in the Pinaleno Mountains. *E. saxatilis* is a rare form collected from Oak Creek Canyon and Little Eden Mountain near Flagstaff. Most other sub-Mogollon Rim populations would be called *E. anchana*. The latter includes populations from Sierra Anchas, Pine, Mazatzal and Mescal mountains, and Pine Canyon (Tonto Bridge).

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